Name:

at1113exam: Expand, factor, and solve quadratics (v326)

1. Expand the following expression into standard form.

$$(8x + 9)(8x - 9)$$

2. Solve the equation.

$$(4x + 5)(3x + 2) \; = \; 0$$

3. Expand the following expression into standard form.

$$(5x + 4)^2$$

4. Expand the following expression into standard form.

$$(6x - 5)(8x - 7)$$

5. Factor the expression.
$$25x^2 - 64$$

6. Solve the equation with factoring by grouping.
$$18x^2 + 24x + 15x + 20 \ = \ 0$$

7. Factor the expression.
$$x^2 - x - 72$$

8. Solve the equation.
$$7x^2 + 20x + 18 \ = \ 4x^2 + 3x - 2$$